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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,394	08/30/2001	Steve Van Kirk	303.755USI	3192
21186	7590 10/18/2006		EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938			DINH, TUAN T	
MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		V	
	Application No.	Applicant(s)	
Office Action Communication	09/945,394	KIRK, STEVE VAN	
Office Action Summary	Examiner	Art Unit	
	Tuan T. Dinh	2841	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet wit	h the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 36(a). In no event, however, may a re will apply and will expire SIX (6) MONT, cause the application to become ABA	ATION. ply be timely filed  HS from the mailing date of this communication. NDONED (35 U.S.C. & 133)	
Status			
1) Responsive to communication(s) filed on 24 Ju	<u>ıly 2006</u> .		
<u> </u>	action is non-final.		
3) Since this application is in condition for allowar	nce except for formal matte	rs, prosecution as to the merits is	
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>8-46,48 and 50-65</u> is/are pending in the	he application.		
4a) Of the above claim(s) 8-19,21-46,48 and 50	' '	consideration.	
5) Claim(s) is/are allowed.			,
6)⊠ Claim(s) <u>20</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) □ acce	epted or b) objected to b	y the Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyand	e. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s	i) is objected to. See 37 CFR 1.121(d).	
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. §	119(a)-(d) or (f).	
<ol> <li>Certified copies of the priority documents</li> </ol>			
2. Certified copies of the priority documents			
3. Copies of the certified copies of the prior		eceived in this National Stage	
application from the International Bureau	` ` '//		
* See the attached detailed Office action for a list	of the certified copies not re	eceived.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Su		
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s).  5) Notice of Inf	/Mail Date ormal Patent Application	
Paper No(s)/Mail Date	6) Other:		

## **DETAILED ACTION**

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Figure 5 and 15 as described as in the specification, see page 6, lines 24-26 and page 7, lines 20-22, which are shown top plane view of different embodiments, see a specification, page 2, [0025]-page 3, [0035].

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Kumagai et al. (U. S. Patent 6,147,573), as in the record.

As to claim 20, Kumagai et al. discloses a circuit board as shown in figures 3B-3C comprising:

first and second conductive layers (20) including first and second interstices (29), wherein the first interstice (29) has a plurality of first widths laying in a first plane, see figure 3B, the width of the first interstice wounded around and parallel with the surface of the conductor layer 20; the second interstice (29) <u>engaged (interlock or connect together</u>, see an attached paper of site <u>Answers.com</u> attaching with the Office action) with the first interstice by a dielectric layer (1) disposed between the first and second

interstices (29) to form a capacitor (28), wherein the second interstice (29) has a second width laying in a second plan; the first and second planes are substantially parallel, and wherein the second width is substantially overlaps at least two of the plurality of the first width.

## Response to Arguments

Applicant's arguments filed 07/24/06 have been fully considered but they are not persuasive.

Applicant argues:

(a) The first and second conductive layers having first and second interstices respectively, and (29) of Kumagai et al ('573) do not engage.

Examiner disagrees because in figure 1A of Kumagai shows elements (20) as conductive layers and also as disclosed in a site of <u>Answers.com</u> (see the attached paper attaching with the Office action) as define that the term "engage" means "interlock", and the "interlock" means "connect together.

Kumagai et al. does disclose the first and second interstices (29) as shown in figures 3B-C that connected together.

(b) Kumagai et al. does not disclose "the conductor 29 having the plurality of the first width."

Examiner disagrees because claim 20 recites "the second width (of the second interstice) substantially overlaps the plurality of widths (of the first interstice), so the question is confused. In addition, as shown in figures 3B-C, the reference does show

because the first and second interstices wounded around and parallel with the surfaces of the conductor layers 20 having widths, and the width of the second interstice that substantially overlaps at least two of the plurality of the widths of the first interstice.

Examiner believes the rejection is proper.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Enad Elvin can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Dinh

October 12, 2006.